

FIGURE 1

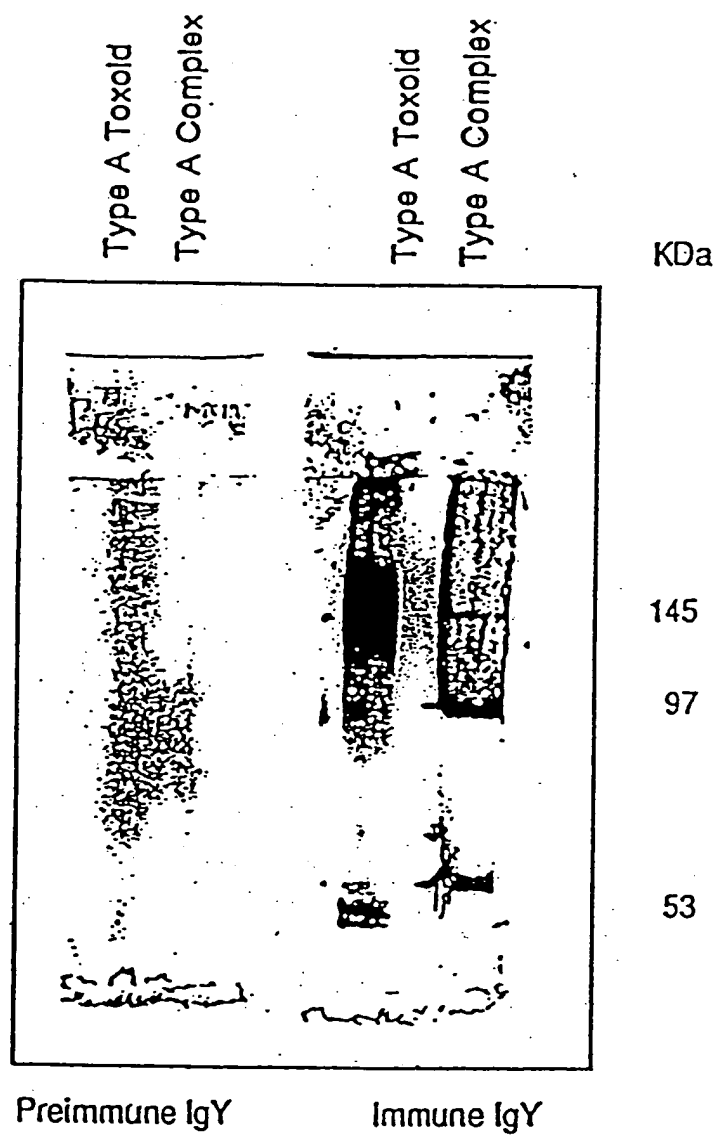


FIGURE 2

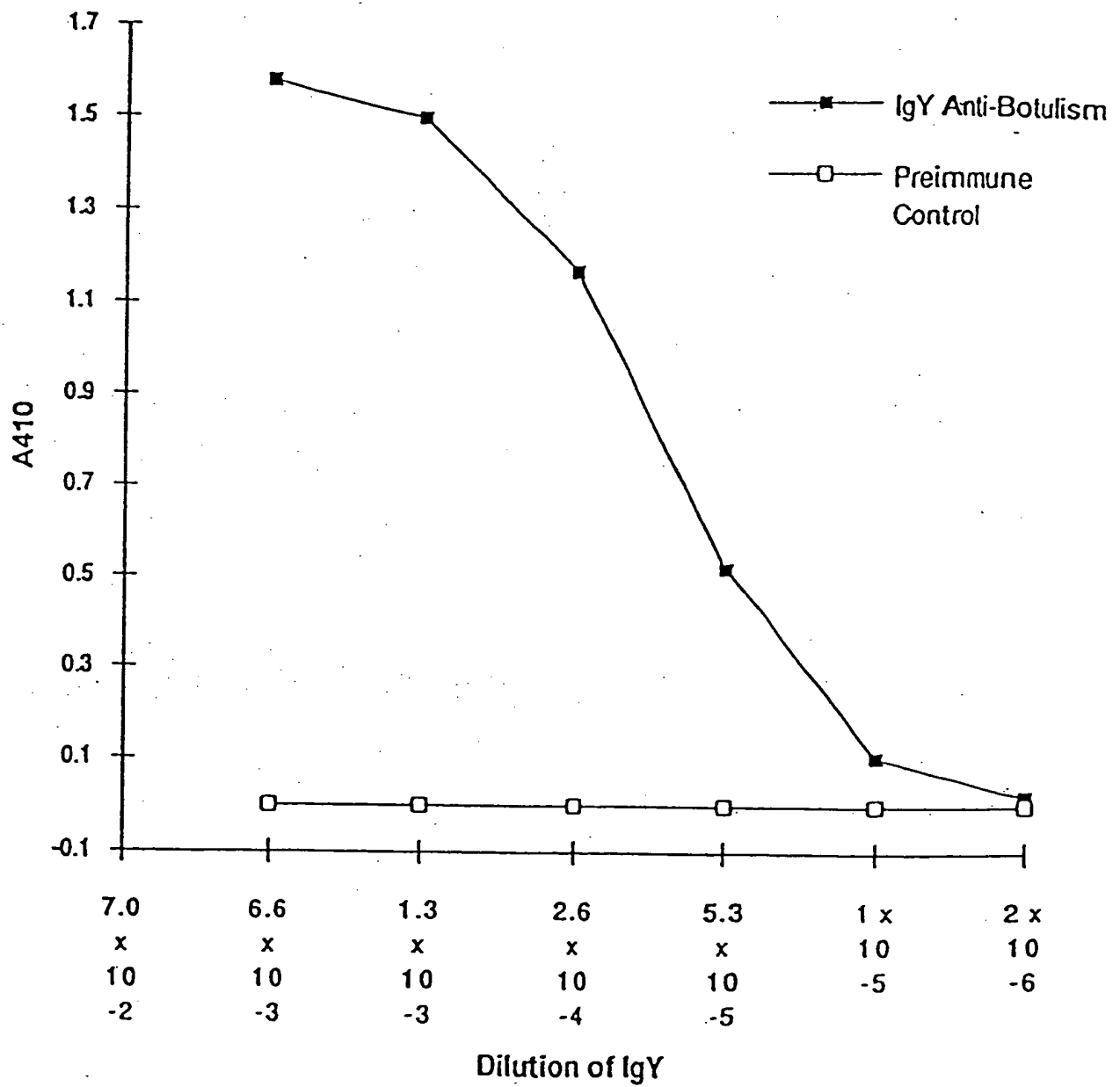


FIGURE 3

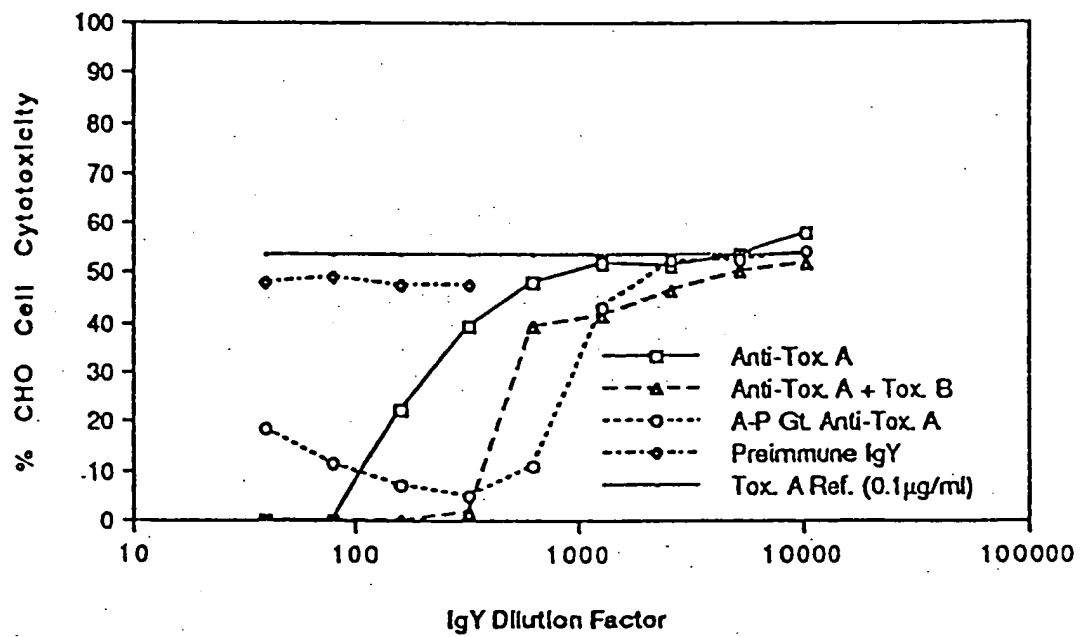


FIGURE 4

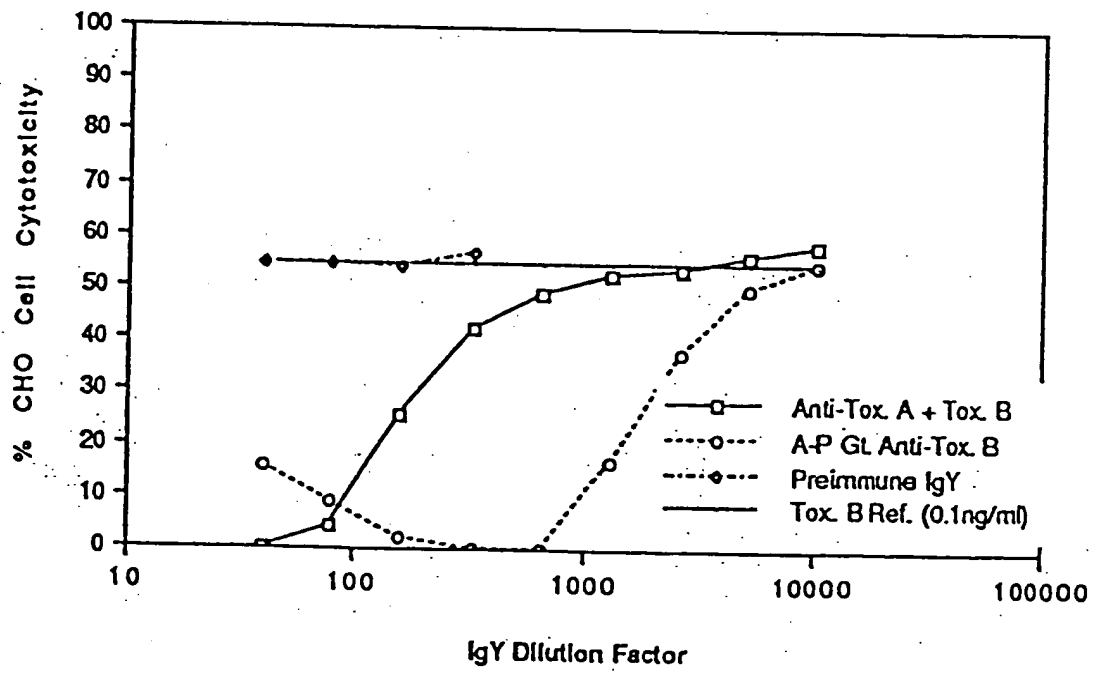


FIGURE 5

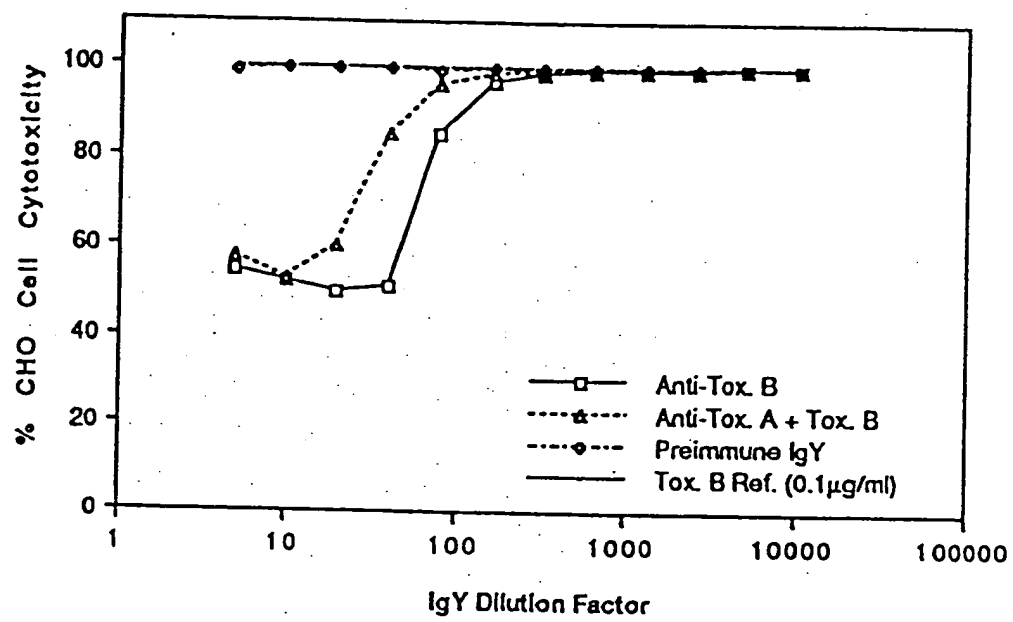
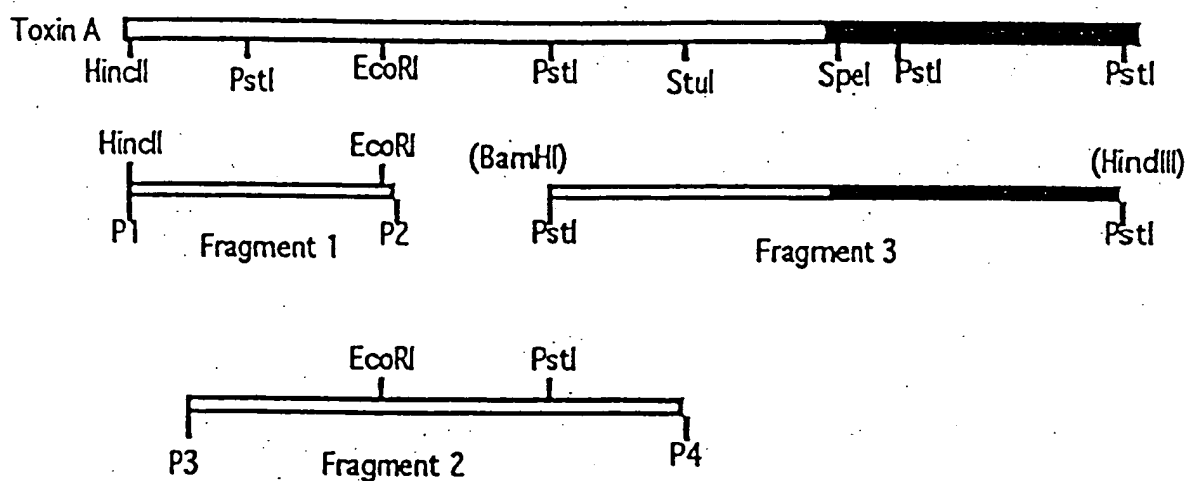
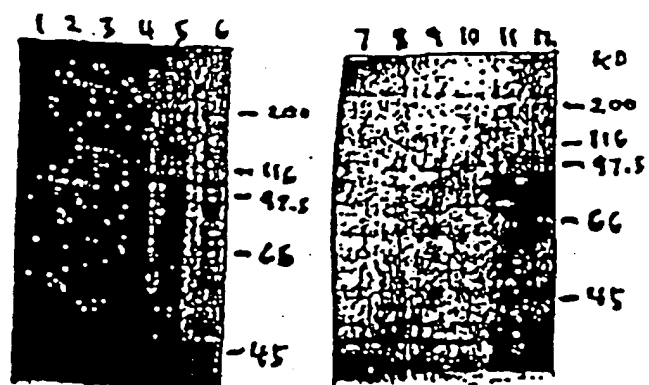


FIGURE 6



P1-P4 are PCR primers 1-4. P1=5'GGAAATTTAGCTGCAGCATCTGAC3', P2=5'TCTAGCAAATTCGCTTGTGTTGAA3', P3=5'CTGCGATATAGCATTAGACC3', P4=5'CTATCTAGGCCTAAAGTAT3'. Indicated restriction sites in fragments 1 and 2 are internal sites used to clone into pGEX2T vector (fragment 1; construct called pGA30-660) or pMALc vector (fragment 2; construct called pMA660-1100). Bracketed restriction sites at ends of fragment 3 are pUC9 polylinker sites utilized to clone fragment 3 into pET23 vector (construct called pPA1100-2680). Numbers in these constructs refer to toxin A amino acid interval that is expressed. The shaded portion of the toxin A gene corresponds to the repeating ligand binding domain.

FIGURE 7



BEST AVAILABLE COPY

FIGURE 8

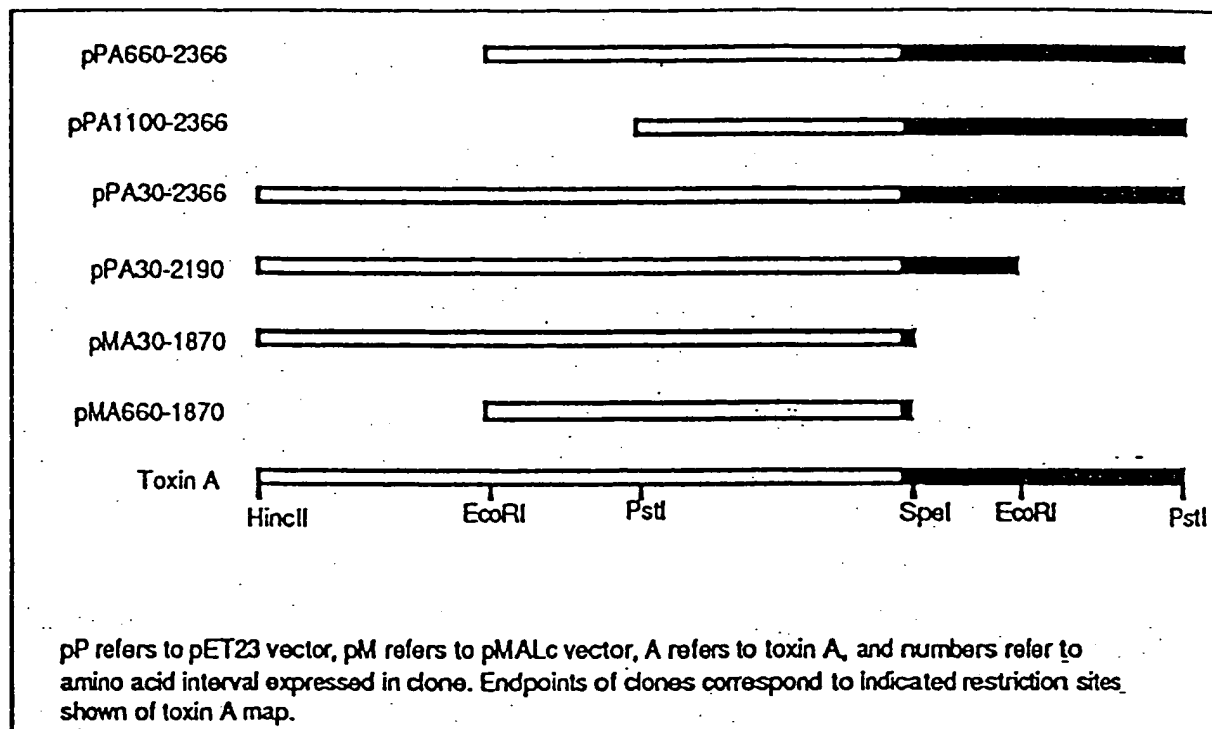


FIGURE 9

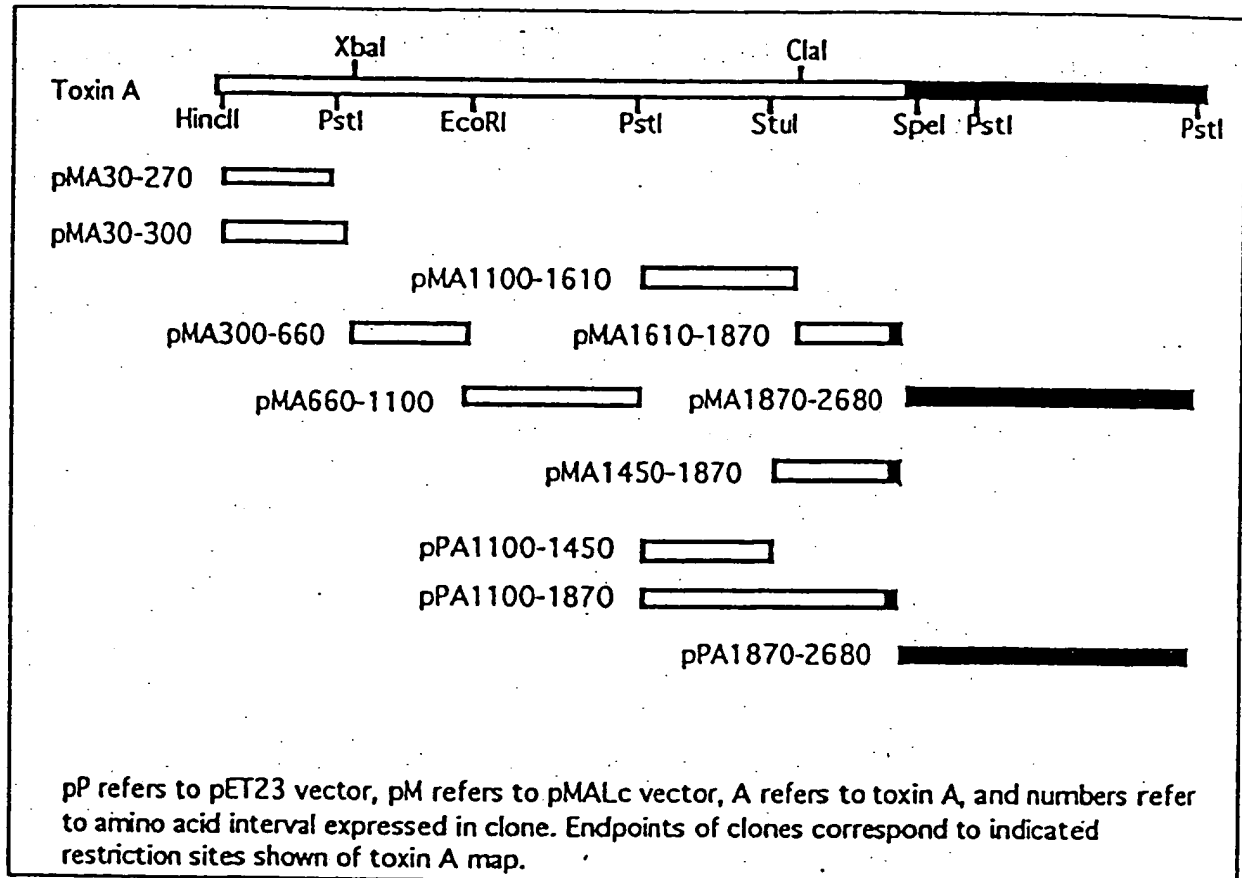
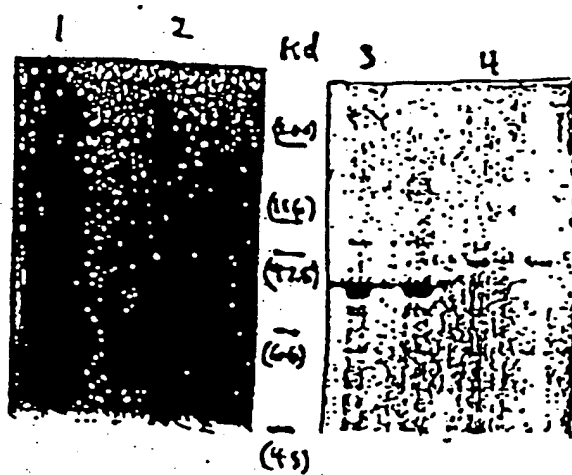


FIGURE 10



BEST AVAILABLE COPY

FIGURE 11

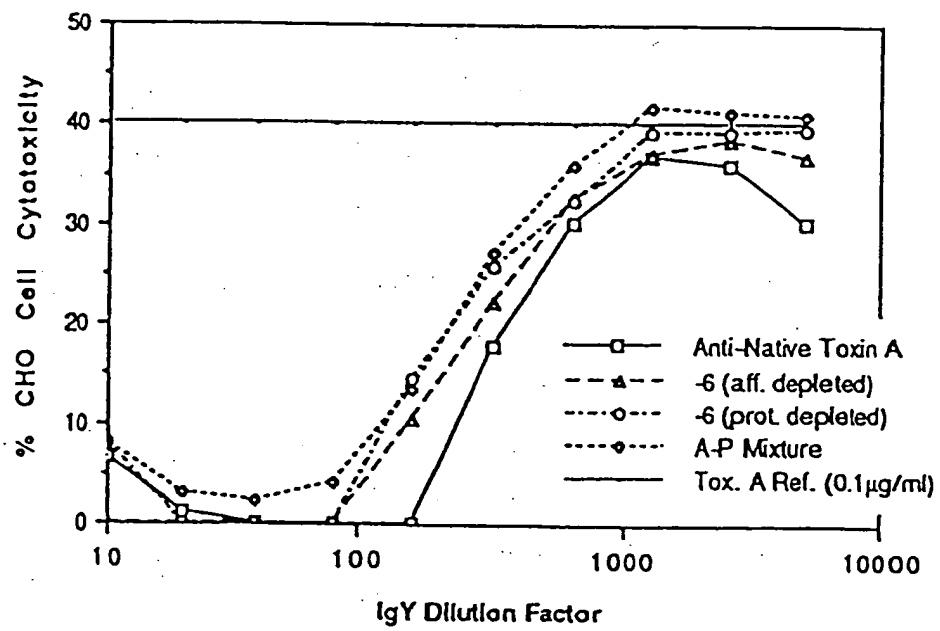


FIGURE 12

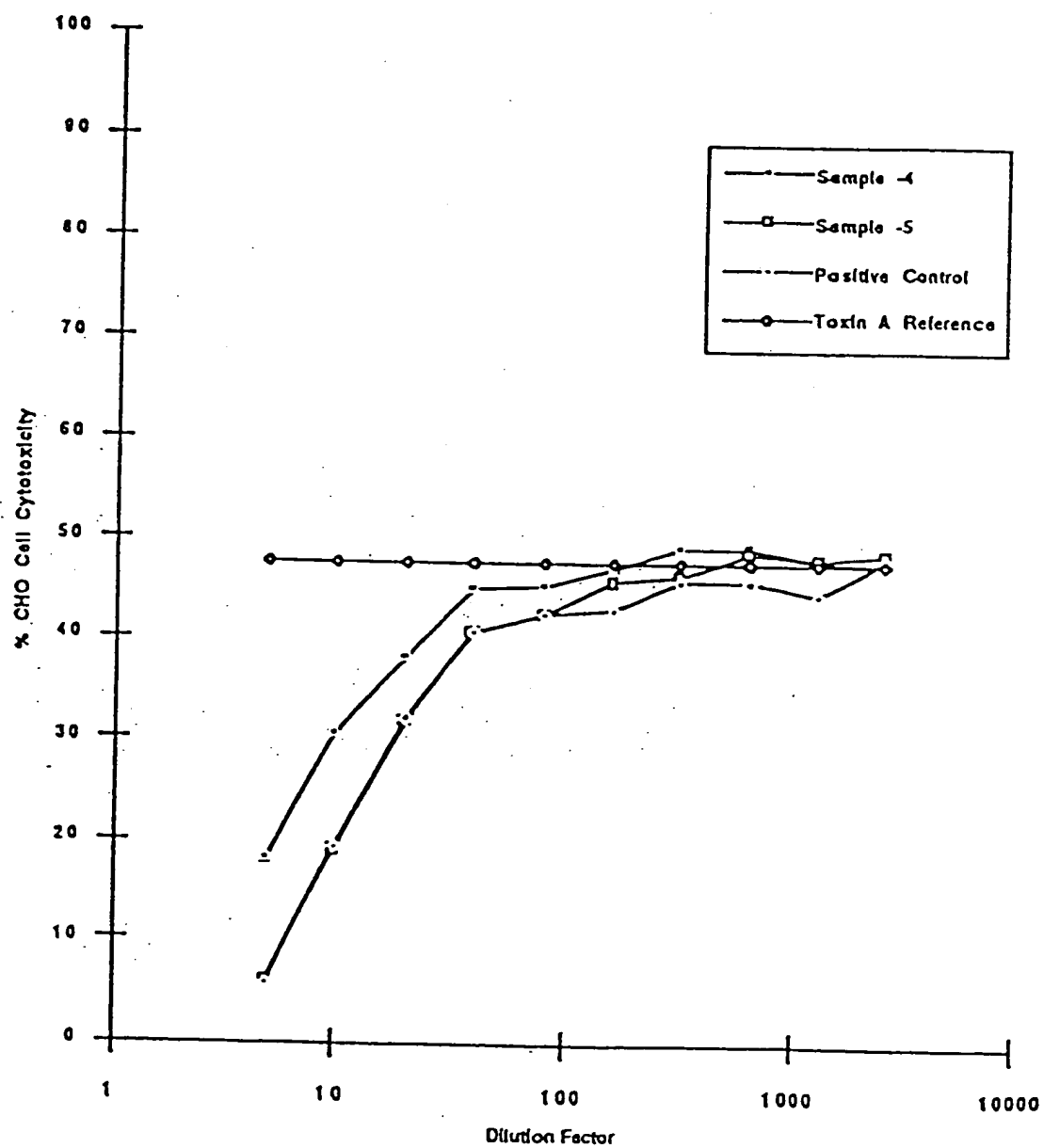


FIGURE 13

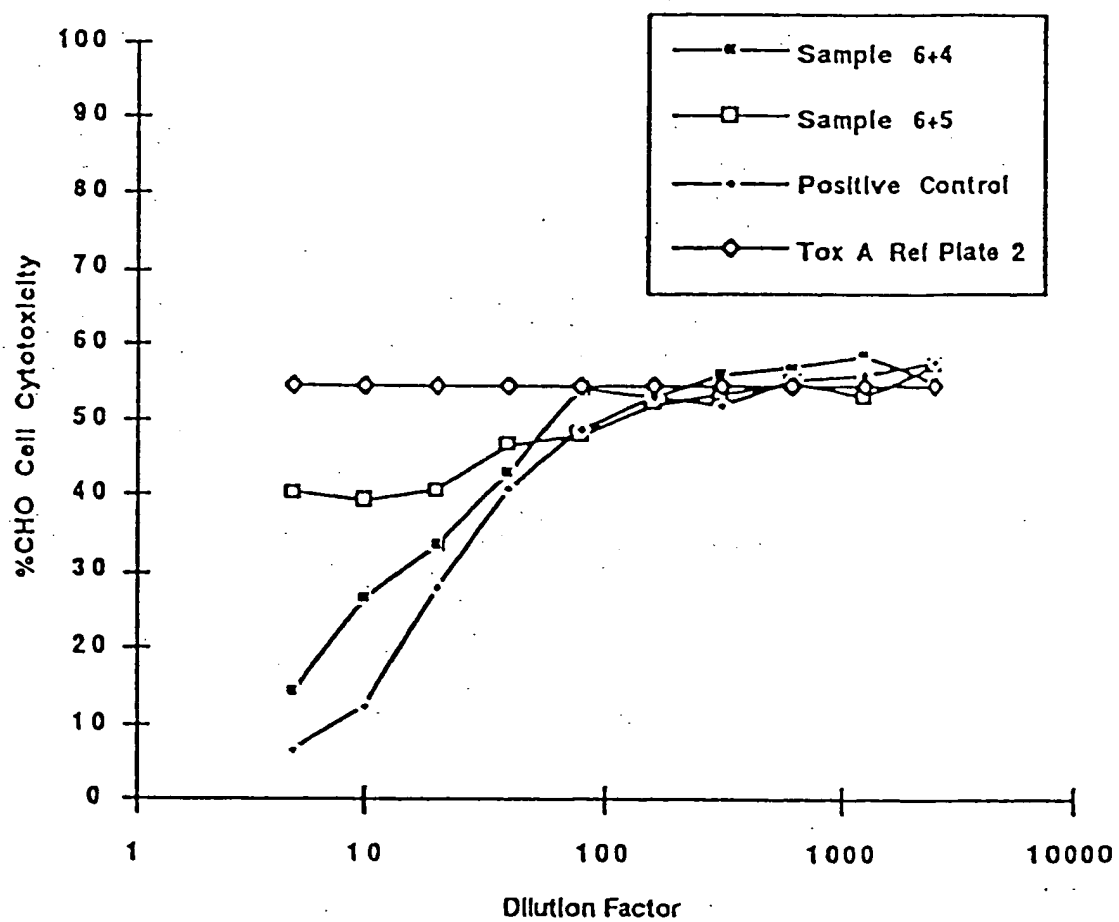


FIGURE 14

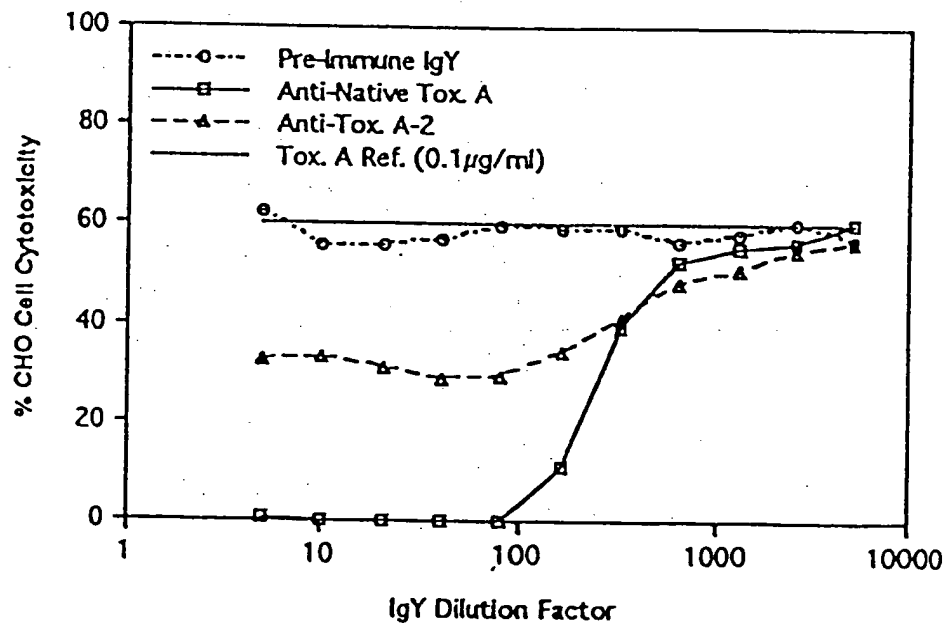
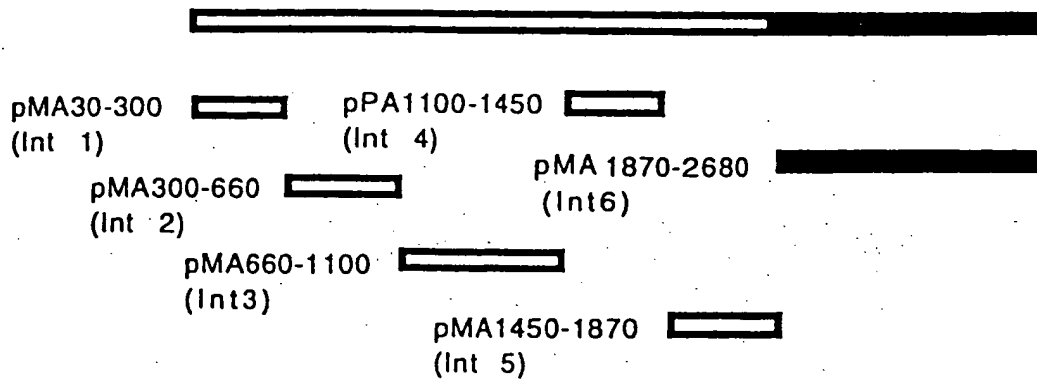


FIGURE 15

A



B

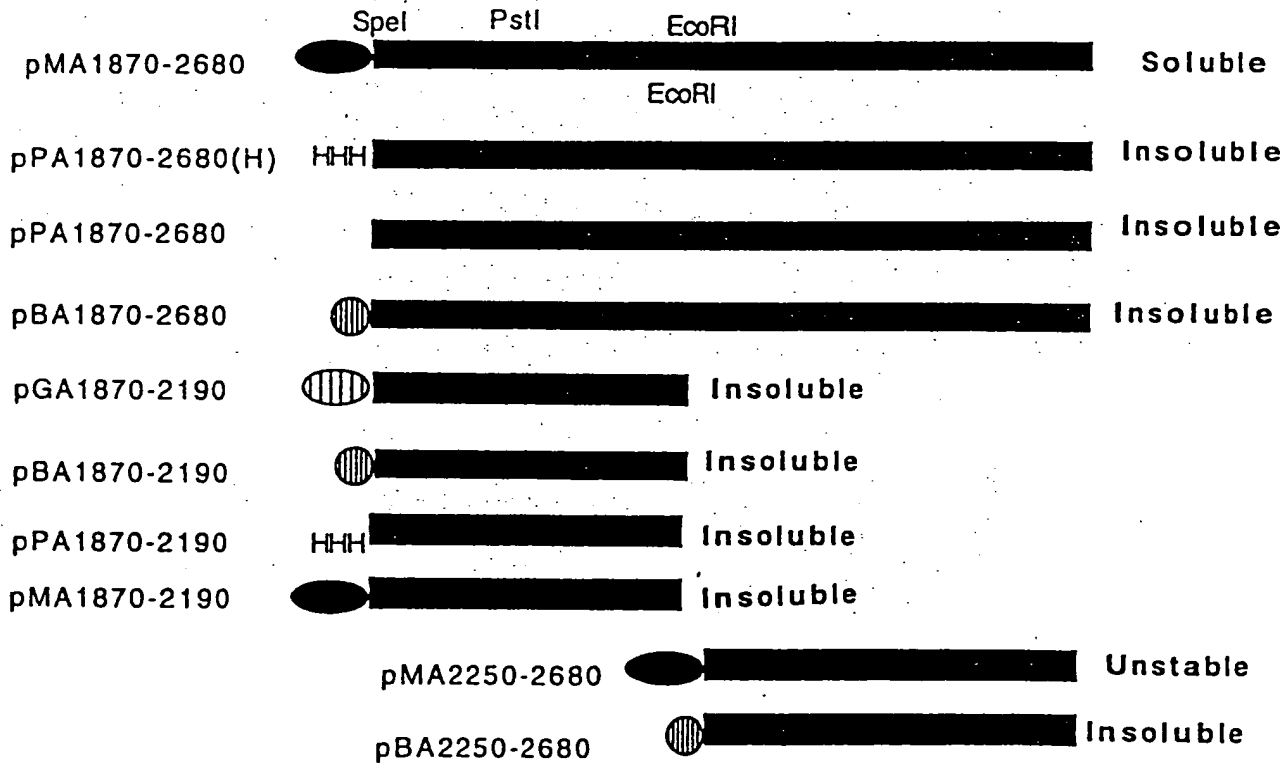


FIGURE 16

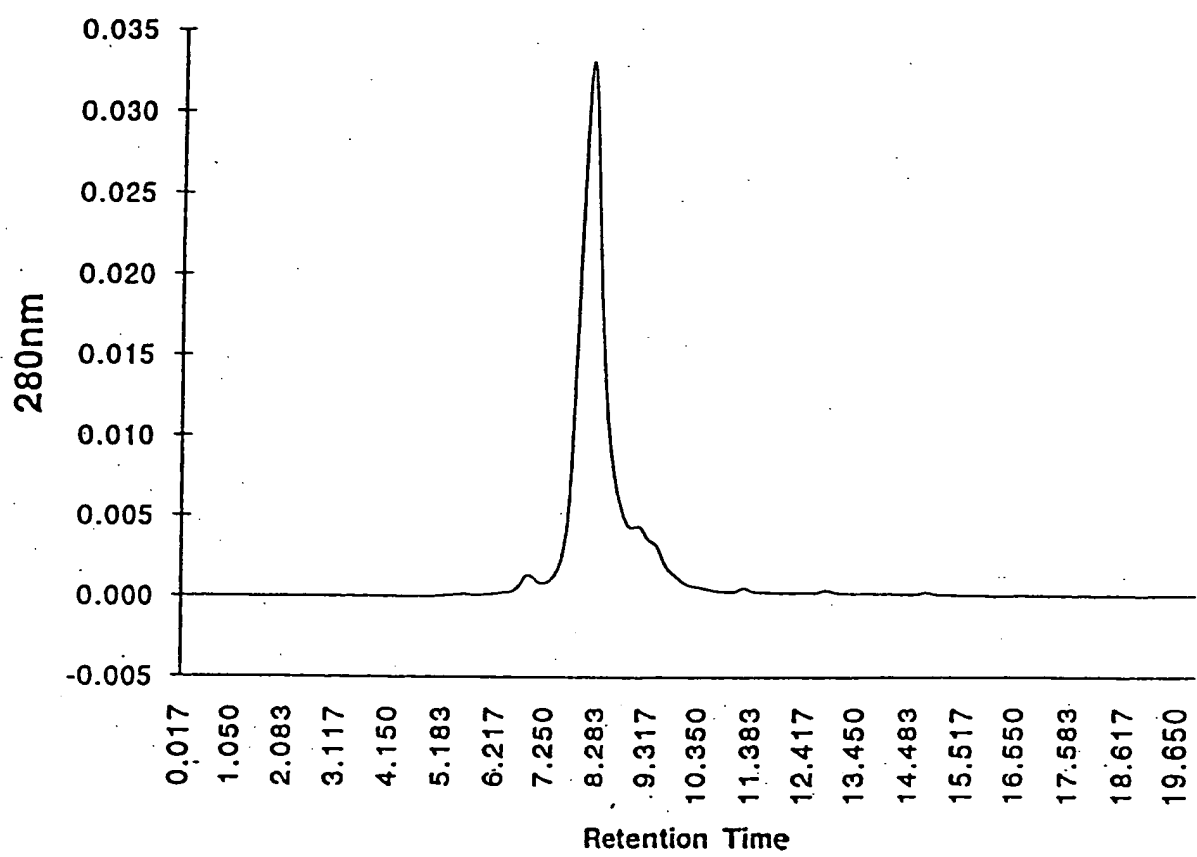


FIGURE 17

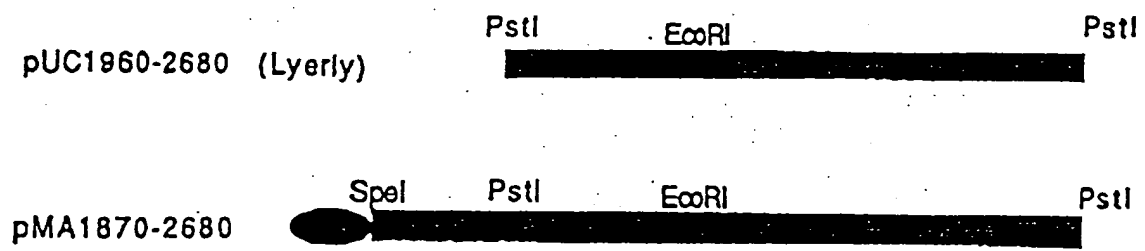


FIGURE 18

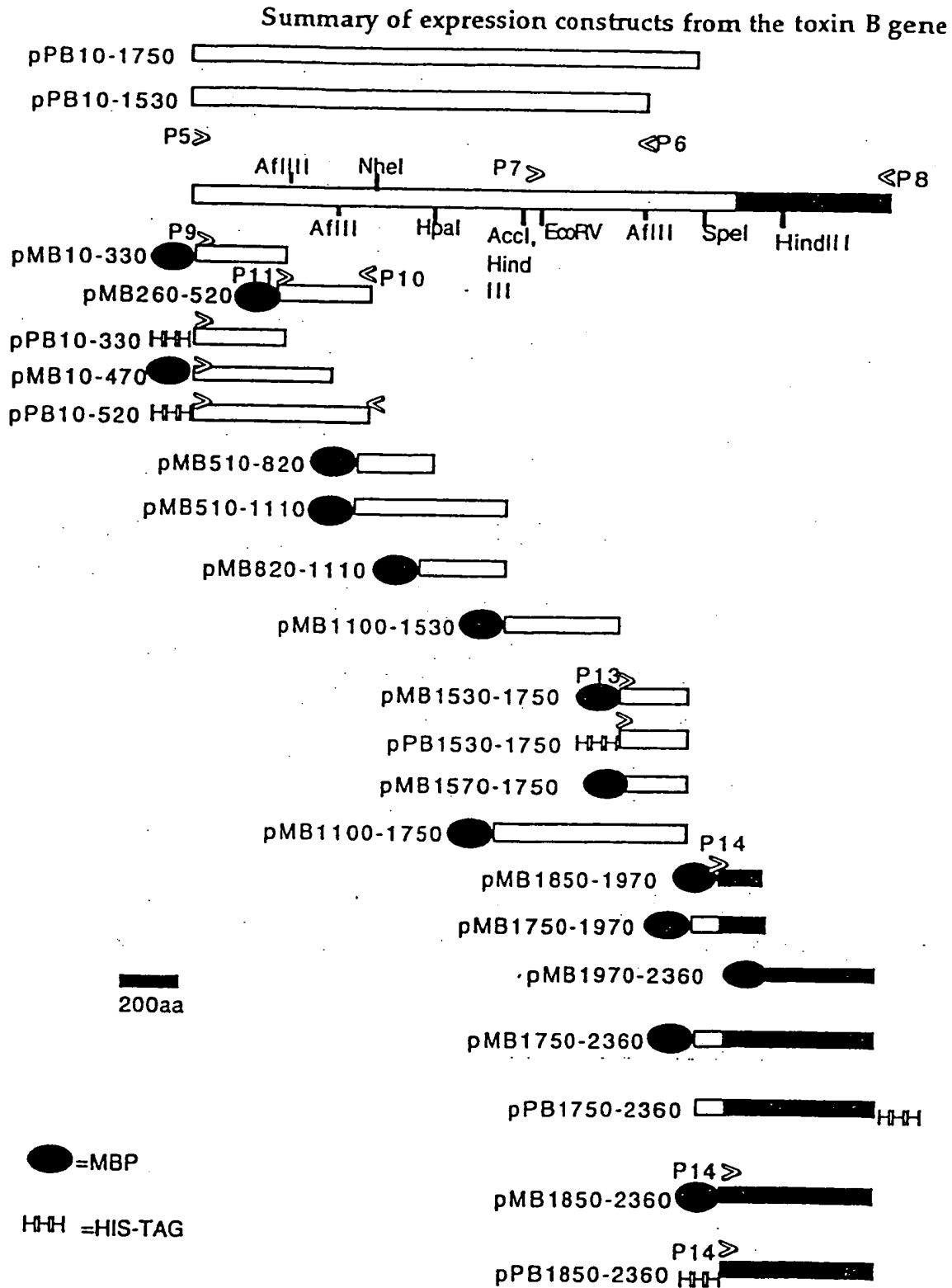


FIGURE 19

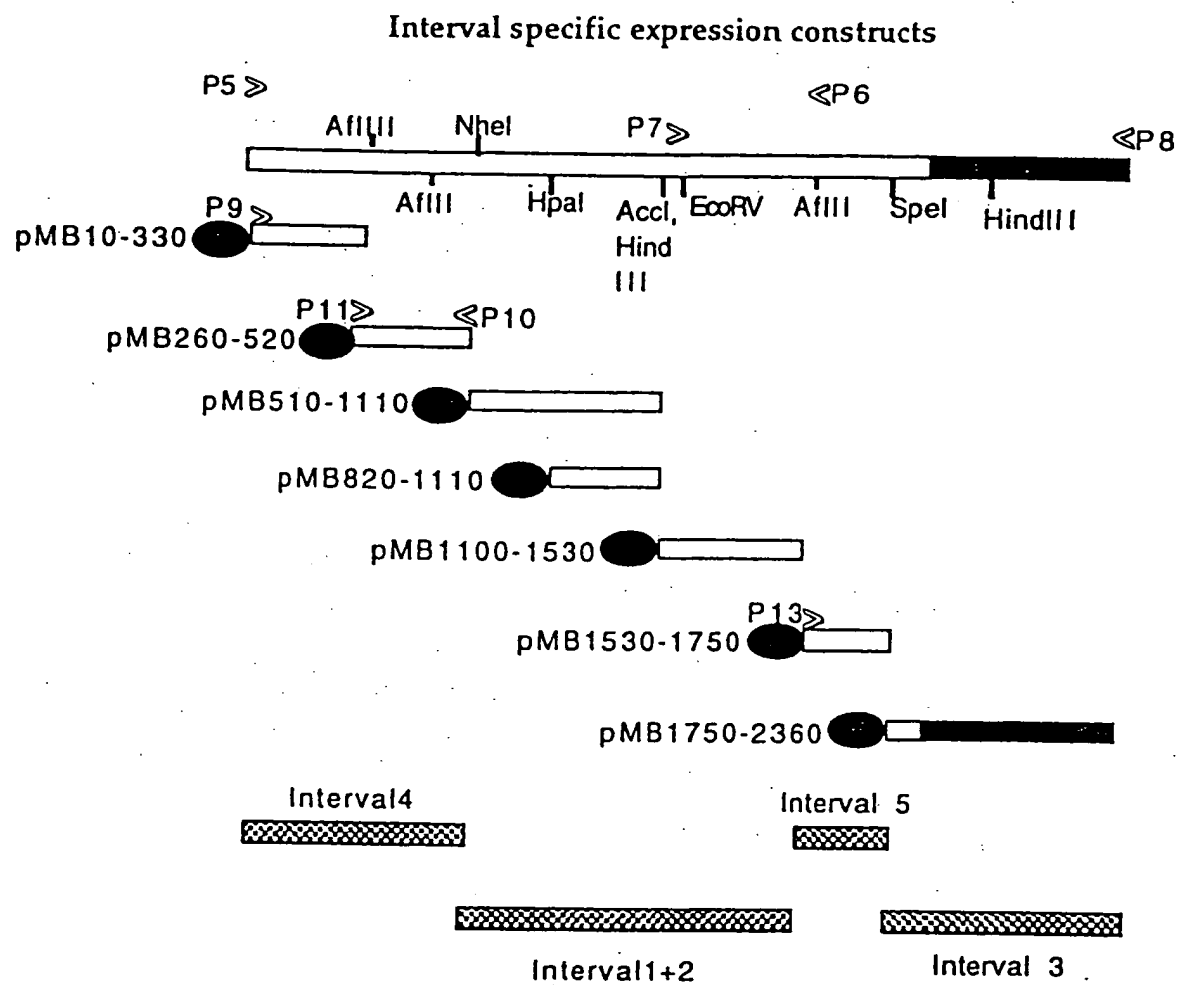


FIGURE 20

Expression constructs from the interval 3 region

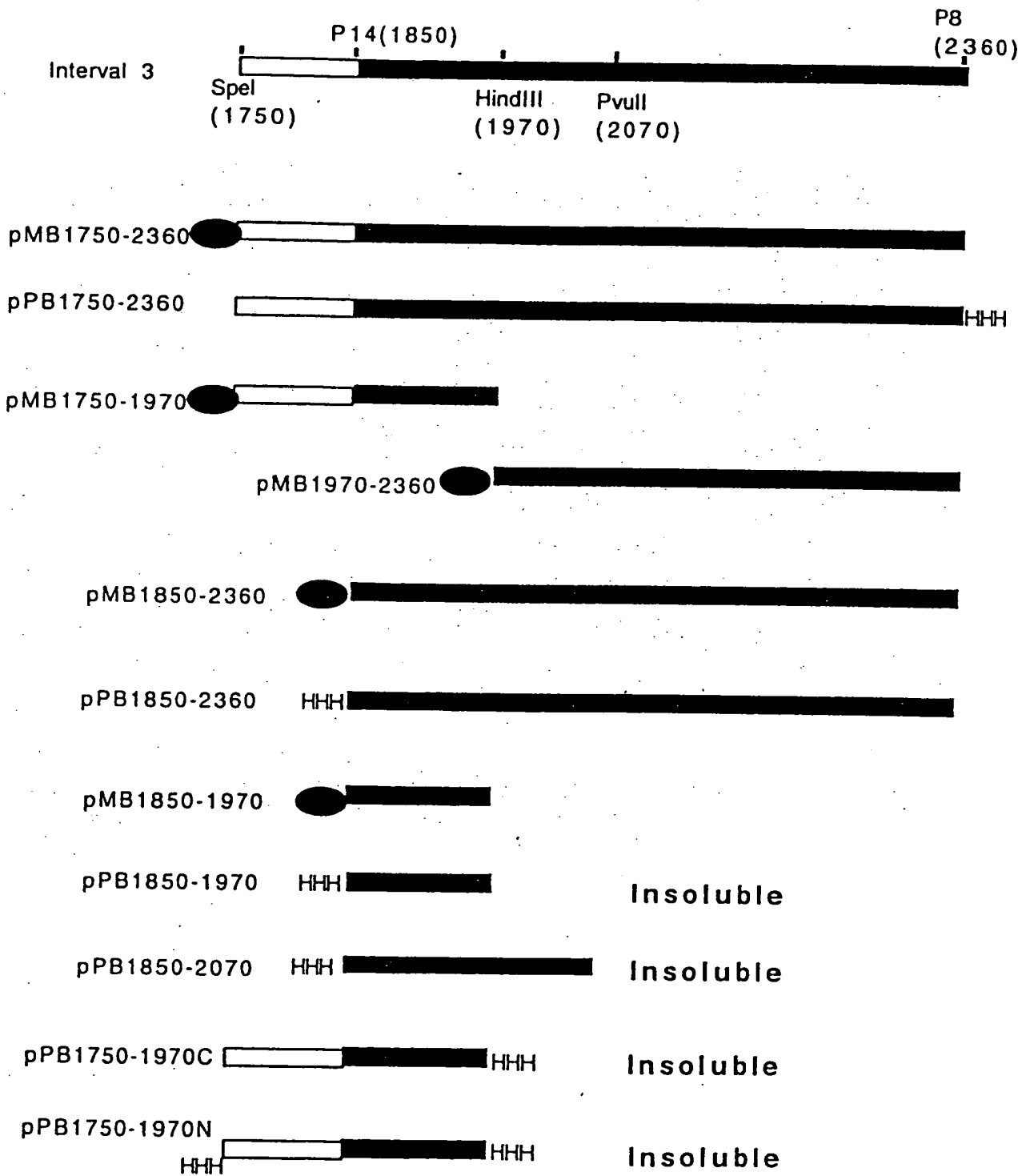
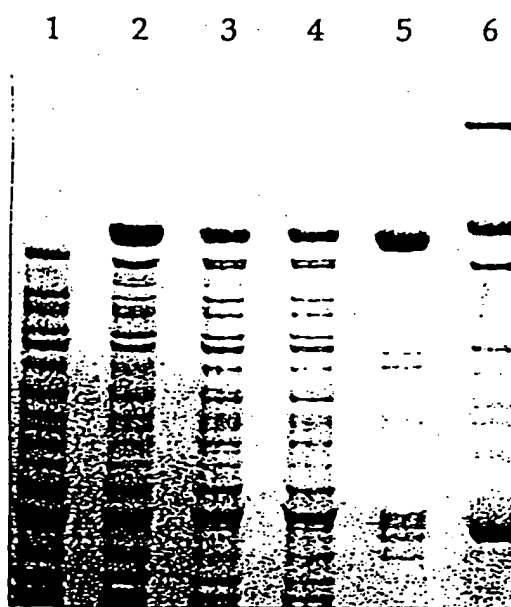


FIGURE 21



BEST AVAILABLE COPY

FIGURE 22

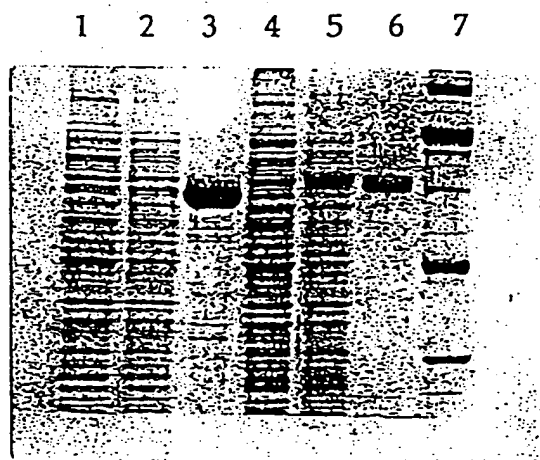


FIGURE 23

Binding of neutralizing CTB antibodies by recombinant toxin B protein

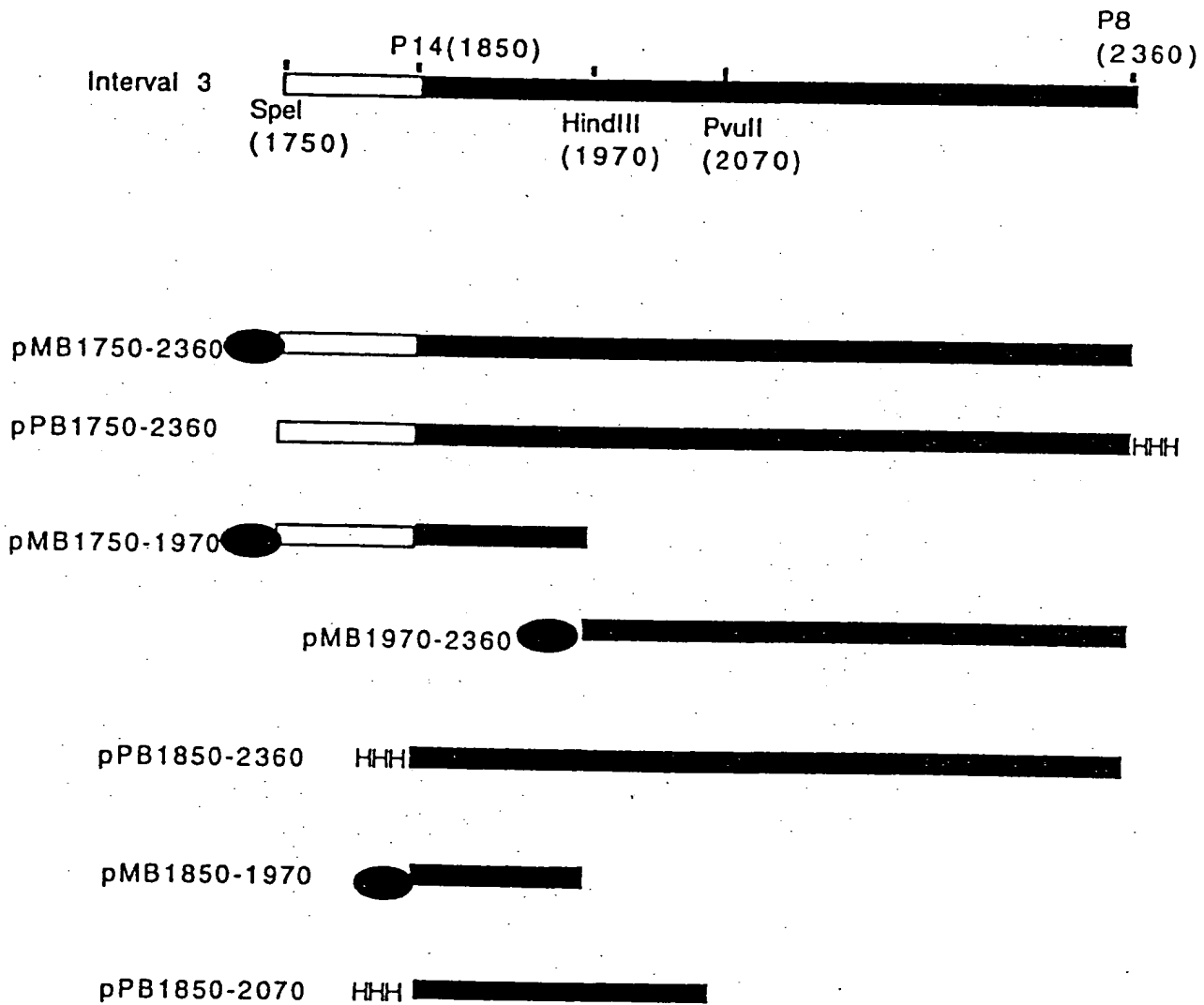


FIGURE 24

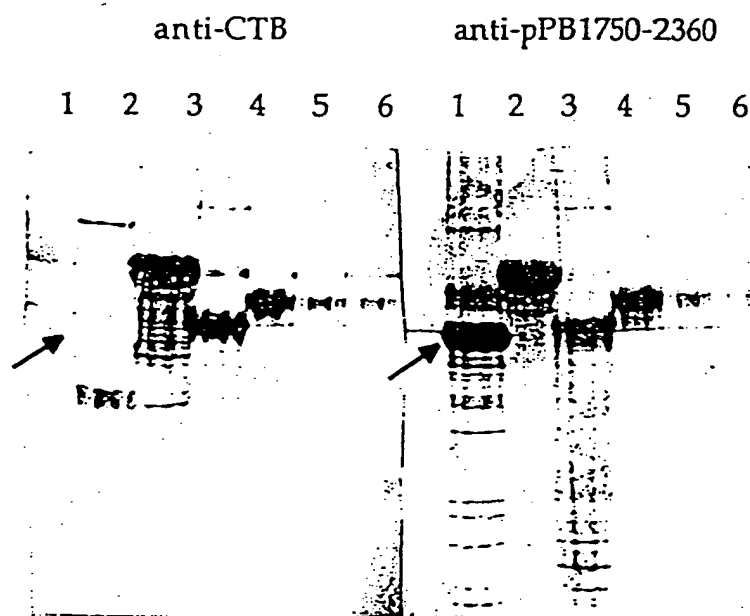


FIGURE 25

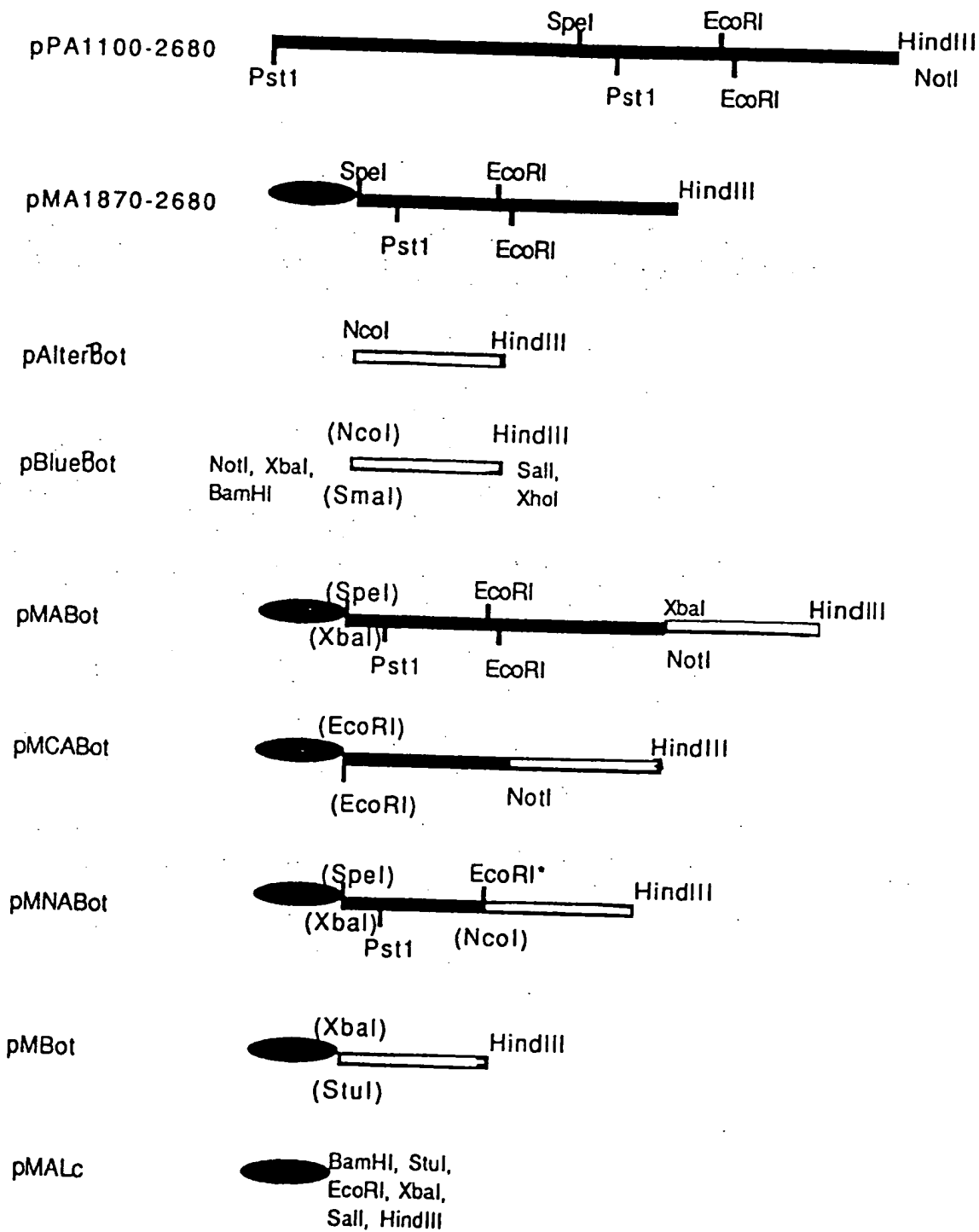


FIGURE 26

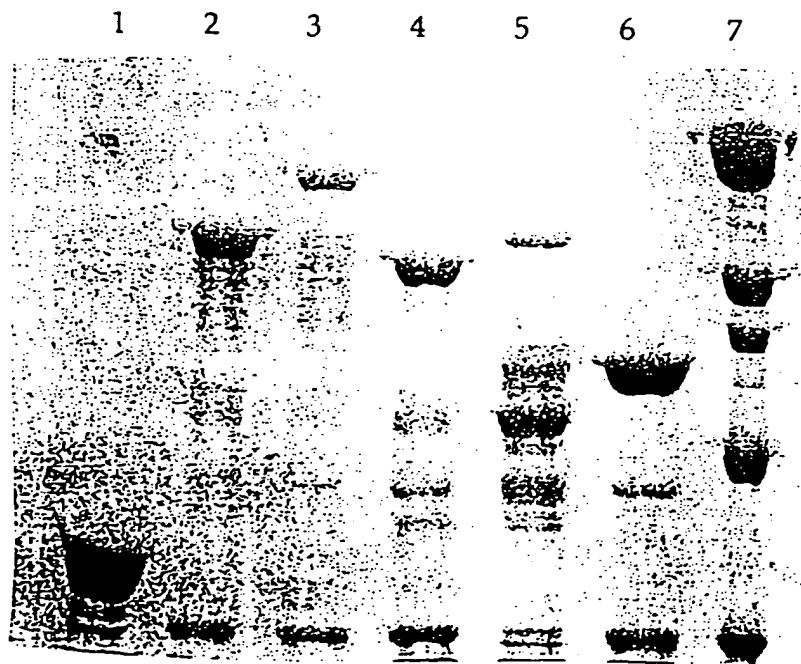


FIGURE 27

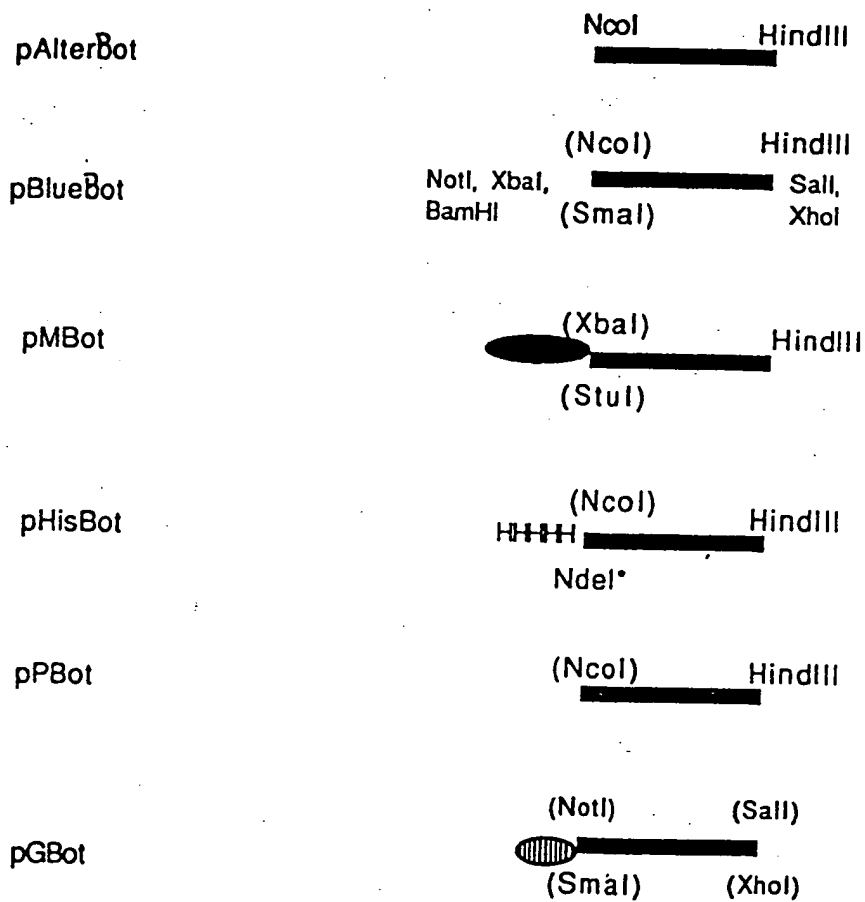
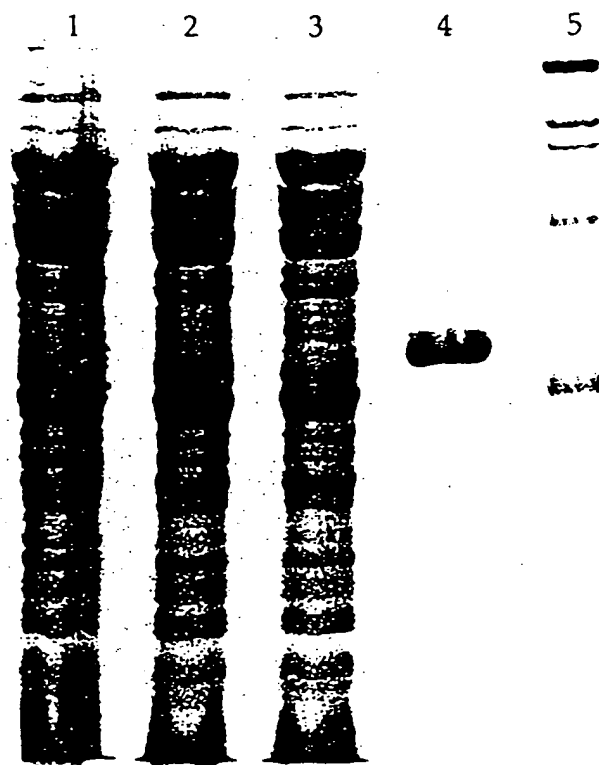


FIGURE 28



BEST AVAILABLE COPY

FIGURE 29

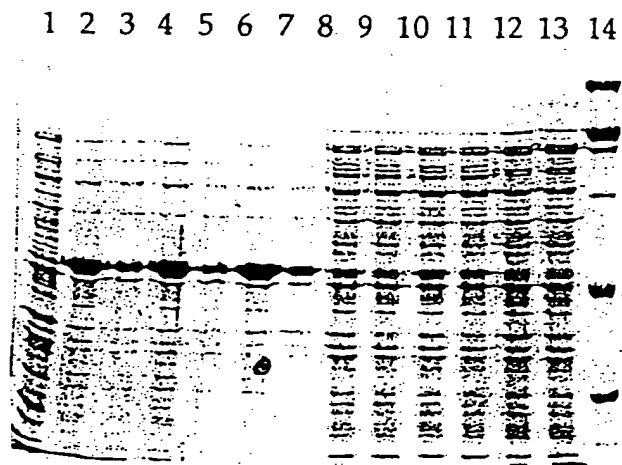
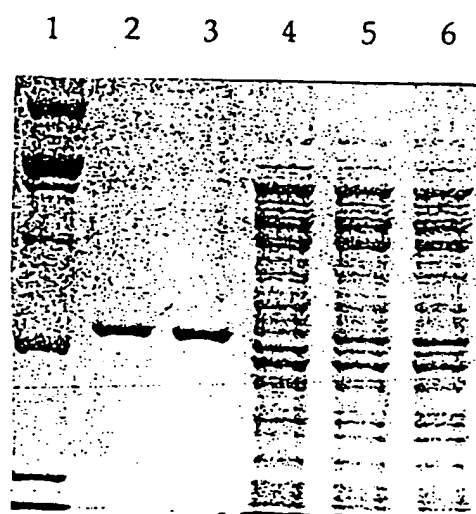


FIGURE 30



BEST AVAILABLE COPY

FIGURE 31

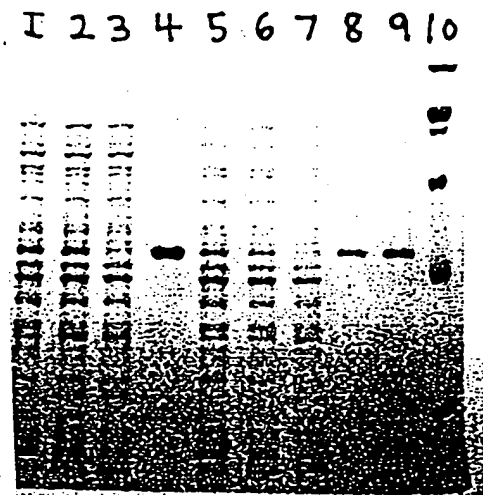
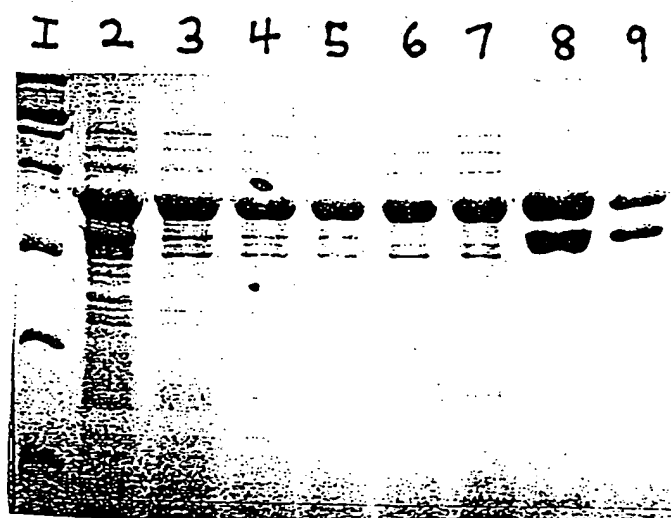


FIGURE 32



BEST AVAILABLE COPY

FIGURE 33

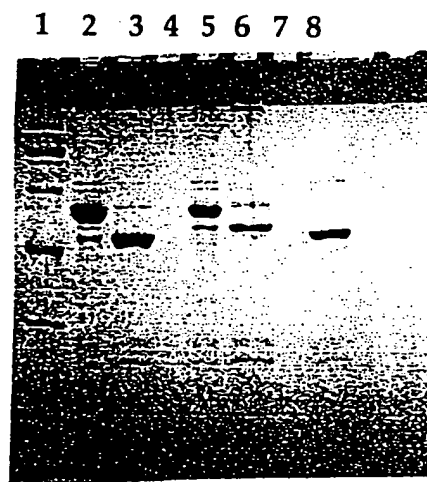
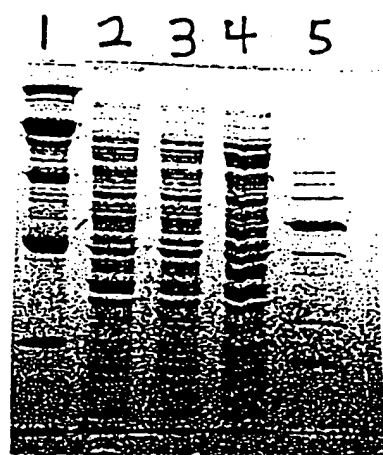


FIGURE 34



BEST AVAILABLE COPY

FIGURE 35

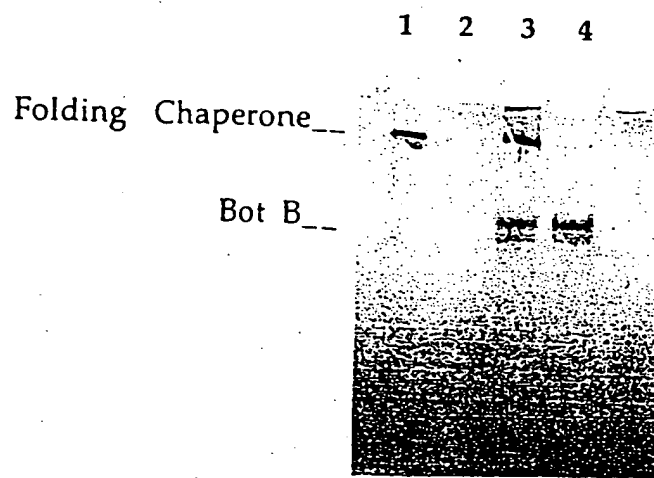


FIGURE 36

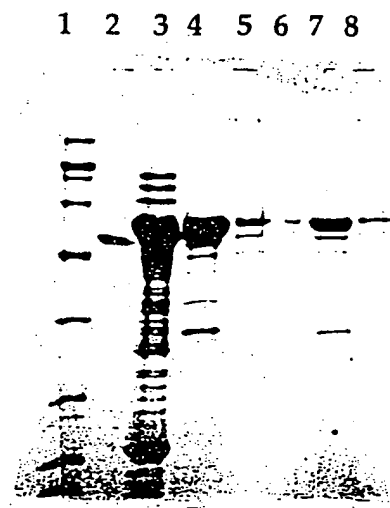


FIGURE 37

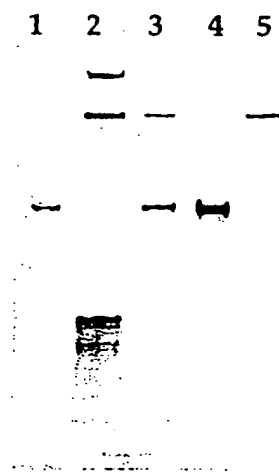


FIGURE 38

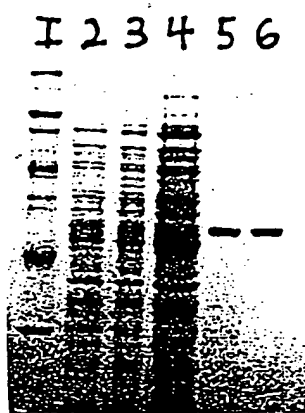


FIGURE 39

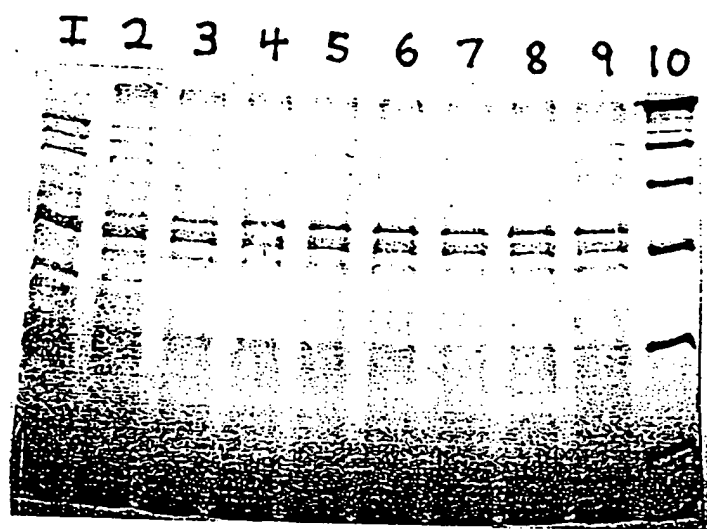


FIGURE 40

